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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,729	07/31/2003	Richard Hsiao	SJO919990196US2	3879

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INTELLECTUAL PROPERTY LAW OFFICE
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CAMPBELL, CA 95008

EXAMINER

KLIMOWICZ, WILLIAM JOSEPH

ART UNIT	PAPER NUMBER
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2652

DATE MAILED: 05/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/632,729

Applicant(s)

HSIAO ET AL.

Examiner

William J. Klimowicz

Art Unit

2652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 10-19 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-9 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7-31-03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 2652

Election/Restrictions

Applicants' election without traverse of Group I (Claims 1-9) in the reply filed on January 18, 2005 is acknowledged.

Claims 10-19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made **without** traverse in the reply filed on January 18, 2005.

Ex Parte Quayle

This application is in condition for allowance except for the following formal matters:

Drawings

The drawings are objected to because Figure 2 fails to depict the line designator "3-3" as set forth on page 6 (line 23) of the instant application.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

Art Unit: 2652

application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 1, 3, 6 and 8 are objected to because of the following informalities:

With regard to claim 1 (line 7) as well as claim 6 (line 10), the word --material-- should be inserted between the words "dielectric" and "layer" in order to remain consistent with the claim language that is recited subsequent thereto.

With regard to claim 3 (line 1) as well as claim 8 (line 1), the designator "P1" should be changed to the designator --P2-- in order to maintain consistency with the preceding claim language and the specification description.

Appropriate correction is required.

Reasons for Allowance

The following is an Examiner's statement of reasons for allowance:

The prior art of record fails to fairly, teach, show or suggest, by either anticipating or rendering obvious, the invention as set forth in the claims of the instant application.

Furthermore, a search made does not detect the combined claimed elements as set forth in the pending claims. Additionally, the reasons for allowance of the claims over the prior art of record is believed to be readily clear, self evident and apparent from the claim language set

Art Unit: 2652

forth in each of claims 1 and 6, when compared and contrasted with the prior art.

More particularly, the instant invention (as set forth in independent claims 1 and 6) provides for a magnetic head, including a substrate; a read head being fabricated upon the substrate; a P1 pole (e.g., 48) being fabricated upon the read head; an insulation layer (e.g., 84) being fabricated upon the P1 pole (e.g., 48); a P2 pole tip seed layer (e.g., 88) being fabricated upon portions of the insulation layer (e.g., 84); a dielectric material layer (e.g., 108) being fabricated upon the P2 pole tip seed layer (e.g., 88) and upon the insulation layer (e.g., 84); a P2 pole tip (e.g., 140) being fabricated upon the P2 pole tip seed layer (e.g., 88) and within the dielectric material layer (e.g., 108); a back gap piece (e.g., 148) being fabricated within the dielectric material layer (e.g., 108) and in magnetic interconnection with the P1 pole (e.g., 48); an induction coil seed layer (e.g., 160) being fabricated in part upon the insulation layer (e.g., 84) and in part upon portions of the dielectric material layer (e.g., 108); an induction coil (e.g., 170) being fabricated upon the induction coil seed layer (e.g., 160) and within the dielectric material layer (e.g., 108); a second insulation layer (e.g., 188) being fabricated upon the induction coil (e.g., 170); a P2 pole yoke (e.g., 192) being fabricated upon the second insulation layer (e.g., 188) in magnetic interconnection with the P2 pole tip (e.g., 140) and with the back gap piece (e.g., 148); an encapsulation layer (e.g., 200) being fabricated above the P2 pole yoke (e.g., 192).

The closet prior art includes Fujisawa et al. (US 5,155,646) who discloses a magnetic head comprising (e.g., see FIGS. 10-12k) forming upon a substrate (11); fabricating a P1 pole (12) upon said substrate (11); fabricating an insulation layer (e.g. 16/61) upon said P1 pole (12); fabricating an RIE etchable dielectric material layer (31b-1) upon said insulation layer (16);

Art Unit: 2652

fabricating trenches within said dielectric material layer (31b-1), including a P2 pole tip trench (for layer 33a-1), an induction coil trench (for coil 19) and a back gap piece trench (for layer (33b-1); simultaneously fabricating a P2 pole tip (33a-1) within said P2 pole tip trench and a back gap piece (33b-1) within said back gap piece trench, such that said back gap piece (33b-1) is magnetically interconnected with said P1 pole (12); fabricating an induction coil (19) within said induction coil trench; fabricating a second insulation layer (e.g., 62) upon said induction coil (19); fabricating a P2 pole yoke (e.g., 13) above said second insulation layer (e.g., 62) in magnetic interconnection with said P2 pole tip (33a-1) and said back gap piece (33b-1).

Fujisawa et al. (US 5,155,646), however, does not teach, show or suggest, the magnetic head as set forth in claims 1 and 6, wherein the layers are formed upon or with the material layers in the manner prescribed by claims 1 and 6, inclusive of the requisite seed layers and the order and manner of final product placement and arrangement within the claimed materials as articulated, *supra*.

Thus, Fujisawa et al. (US 5,155,646) does not disclose the invention as set forth in the manner, function and relationship relative to other claimed structure as prescribed by the independent claims 1 and 6.

Additionally, Fujisawa et al. (US 5,155,646) does not provide, alone or in combination with the art of record or general knowledge within the art, any suggestion or teaching for the invention as set forth in the independent claims 1 and 6.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

Art Unit: 2652

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

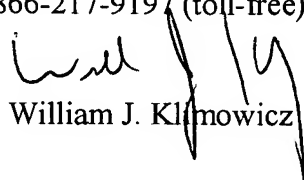
Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William J. Klimowicz whose telephone number is (571) 272-7577. The examiner can normally be reached on Monday-Thursday (6:30AM-5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


William J. Klimowicz

Application/Control Number: 10/632,729

Page 7

Art Unit: 2652

WJK

Primary Examiner
Art Unit 2652

WJK